

In the claims:

Please cancel claim 23, add claims 24-26 and amend claims 1, 3, 4, 8, 10, 11 and 14-22 as indicated below. A complete listing of the claims follows.

1. (Currently amended) A system, comprising:
 - a storage device configured to provide a storage space for data storage store a plurality of files; and
 - a file system configured to map a plurality of files and a plurality of named streams corresponding respectively to said files to said storage space for storage and to manage access to said storage device, wherein said named streams are configured to store metadata corresponding respectively to said files, and wherein said file system is configured to:
 - detect an operation to modify an identity of a first one of said files stored on said storage device; and
 - subsequent in response to detecting said operation, store a record of said operation associated with within a respective one of said named streams corresponding to said first file, wherein said record includes a signature corresponding to said first file.
2. (Original) The system as recited in claim 1, wherein said operation corresponds to a file create operation, a file delete operation, a file rename operation, or a file copy operation.
3. (Currently amended) The system as recited in claim 1, ~~wherein said record is stored in a named stream corresponding to said first file~~, wherein said file system comprises a history stream, and wherein said file system is further configured to store an indication of said operation in said history stream in response to storing said record in said respective named stream corresponding to said first file.

4. (Currently amended) The system as recited in claim ~~[[1]]~~ 3, wherein said file system is further configured to scan said history stream independently of detecting operations to modify identities of ones of said plurality of files, and in response to detecting said indication of said operation in said history stream, to store said record of said operation ~~is stored~~ in a database configured to store a plurality of entries, and wherein said database is further configured to respond to a query of said plurality of entries.

5. (Original) The system as recited in claim 1, wherein said record is stored in extensible markup language (XML) format.

6. (Original) The system as recited in claim 1, wherein said signature is computed according to the Message Digest 5 (MD5) algorithm.

7. (Currently amended) The system as recited in claim 1, wherein subsequent to storing said record, said file system is further configured to associate said record with a second one of said files in response to detecting a second operation to modify the identity of said first file, wherein said second operation corresponds to a file copy operation specifying said first file as a copy source and said second file as a copy destination.

8. (Currently amended) A method, comprising:
storing a plurality of files;
a file system mapping a plurality of files and a plurality of named streams corresponding respectively to said files to a storage space for data storage provided by a storage device, wherein said file system is configured to manage access to said storage device, and wherein said named streams are configured to store metadata corresponding respectively to said files;
said file system detecting an operation to modify an identity of a first ~~stored~~ one of said files; and
subsequent in response to detecting said operation, said file system storing a record of said operation ~~associated with~~ within a respective one of said

named streams corresponding to said first ~~stored~~ file, wherein said record includes a signature corresponding to said first ~~stored~~ file.

9. (Original) The method as recited in claim 8, wherein said operation corresponds to a file create operation, a file delete operation, a file rename operation, or a file copy operation.

10. (Currently amended) The method as recited in claim 8, ~~wherein said record is stored in a named stream corresponding to said first stored file, and~~ wherein the method further comprises storing an indication of said operation in a history stream in response to storing said record in said respective named stream corresponding to said first file.

11. (Currently amended) The method as recited in claim ~~[[8]]~~ 10, further comprising:
said file system scanning said history stream independently of detecting
operations to modify identities of ones of said plurality of files, and
in response to detecting said indication of said operation in said history stream,
said file system storing ~~wherein said record is stored in a database~~
configured to store a plurality of entries, ~~and~~ wherein said database is
further configured to respond to a query of said plurality of entries.

12. (Original) The method as recited in claim 8, wherein said record is stored in extensible markup language (XML) format.

13. (Original) The method as recited in claim 8, wherein said signature is computed according to the Message Digest 5 (MD5) algorithm.

14. (Currently amended) The method as recited in claim 8, further comprising associating said record with a second ~~stored~~ one of said files in response to detecting a second operation to modify the identity of said first ~~stored~~ file, wherein said second operation corresponds to a file copy operation specifying said first file as a copy source and said second file as a copy destination.

15. (Currently amended) A tangible, computer-accessible storage medium comprising program instructions, wherein the program instructions are computer-executable to implement:

store a plurality of files;

a file system mapping a plurality of files and a plurality of named streams corresponding respectively to said files to a storage space for data storage provided by a storage device, wherein said file system is configured to manage access to said storage device, and wherein said named streams are configured to store metadata corresponding respectively to said files;

said file system detecting an operation to modify an identity of a first stored one of said files; and

subsequent in response to detecting said operation, said file system storing store a record of said operation associated with within a respective one of said named streams corresponding to said first stored file, wherein said record includes a signature corresponding to said first stored file.

16. (Currently amended) The computer-accessible storage medium as recited in claim 15, wherein said operation corresponds to a file create operation, a file delete operation, a file rename operation, or a file copy operation.

17. (Currently amended) The computer-accessible storage medium as recited in claim 15, ~~wherein said record is stored in a named stream corresponding to said first stored file,~~ and wherein said program instructions are further computer-executable to store an indication of said operation in a history stream in response to storing said record in said respective named stream corresponding to said first file.

18. (Currently amended) The computer-accessible storage medium as recited in claim ~~[[15]]~~ 17, wherein said program instructions are further computer-executable to implement:

said file system scanning said history stream independently of detecting operations to modify identities of ones of said plurality of files, and in response to detecting said indication of said operation in said history stream, said file system storing ~~wherein~~ said record is ~~stored~~ in a database configured to store a plurality of entries, ~~and~~ wherein said database is further configured to respond to a query of said plurality of entries.

19. (Currently amended) The computer-accessible storage medium as recited in claim 15, wherein said record is stored in extensible markup language (XML) format.

20. (Currently amended) The computer-accessible storage medium as recited in claim 15, wherein said program instructions are further computer-executable to associate said record with a second one of said ~~stored~~ files in response to detecting a second operation to modify the identity of said first ~~stored~~ file, wherein said second operation corresponds to a file copy operation specifying said first file as a copy source and said second file as a copy destination.

21. (Currently amended) A system, comprising:
a storage device configured to provide a storage space for data storage ~~store a plurality of files~~; and
a file system configured to map a plurality of files and a plurality of named streams corresponding respectively to said files to said storage space for storage and to manage access to said storage device, wherein said named streams are configured to store metadata corresponding respectively to said files, and wherein said file system is further configured to: determine a file lineage relationship between a first file and a second file detect an identity-modifying file operation specifying one or more source ones of said plurality of files and a destination one of said plurality of files; and
in response to detecting said identity-modifying file operation, store a record of said identity-modifying file operation within said

respective named stream corresponding to said destination file, and for existing records of operations previously detected by said file system and responsively stored within said respective named streams corresponding to said one or more source files, store at least some of said existing records within said respective named stream corresponding to said destination file.

22. (Currently amended) The system as recited in claim 21, wherein for each given one of said files, said file system is further configured to generate a respective signature dependent upon at least a portion of content of said given file, to store a record of said respective signature within said respective named stream corresponding to said given file, and to regenerate and store an additional record of said respective signature in response to detecting a change in content of said given file, and wherein for a first and a second one of said plurality of files, said file system is further configured to determine whether said first and said second files share a record indicating a common signature. ~~determining said file lineage relationship comprises determining whether said first file and said second file are members of the same lineage pool.~~

23. (Canceled)

24. (New) The system as recited in claim 1, wherein said file system is further configured to:

detect an identity-modifying file operation specifying one or more source ones of said plurality of files and a destination one of said plurality of files; and
in response to detecting said identity-modifying file operation, for existing records of operations previously detected by said file system and responsively stored within said respective named streams corresponding to said one or more source files, store at least some of said existing records within said respective named stream corresponding to said destination file.

25. (New) The method as recited in claim 8, further comprising:

said file system detecting an identity-modifying file operation specifying one or more source ones of said plurality of files and a destination one of said plurality of files; and

in response to detecting said identity-modifying file operation, for existing records of operations previously detected by said file system and responsively stored within said respective named streams corresponding to said one or more source files, said file system storing at least some of said existing records within said respective named stream corresponding to said destination file.

26. (New) The computer-accessible storage medium as recited in claim 15, wherein said program instructions are further computer-executable to implement:

said file system detecting an identity-modifying file operation specifying one or more source ones of said plurality of files and a destination one of said plurality of files; and

in response to detecting said identity-modifying file operation, for existing records of operations previously detected by said file system and responsively stored within said respective named streams corresponding to said one or more source files, said file system storing at least some of said existing records within said respective named stream corresponding to said destination file.